

**ABSTRACT OF THE DISCLOSURE**

A method is disclosed for operating a RF receiver of a communications equipment, as is circuitry for implementing the method. The method includes, while operating under the control of a data processor of the communications equipment, generating a calibration signal; injecting the calibration signal into a low noise amplifier (LNA) of the RF receiver; measuring a downconverted response of the receiver at a plurality of different frequencies of the calibration signal, or measuring the downconverted response of the receiver at a plurality of different LNA tuning combinations using a fixed calibration frequency, and at least one of tuning a resonance frequency of at least one LNA resonator based on the measured downconverted response so as to compensate at least for variations in component values that comprise the at least one resonator, or adjusting the linearity of the receiver.

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